538,282

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

## (19) World Intellectual Property Organization International Bureau





(43) International Publication Date 1 July 2004 (01.07.2004)

PCT

# (10) International Publication Number WO 2004/056045 A1

(51) International Patent Classification<sup>7</sup>: 12/56

H04L 12/28,

(21) International Application Number:

PCT/IB2003/005742

(22) International Filing Date: 5 December 2003 (05.12.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 0229529.3

18 December 2002 (18.12.2002)

(71) Applicant (for all designated States except US): KONIN-KLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

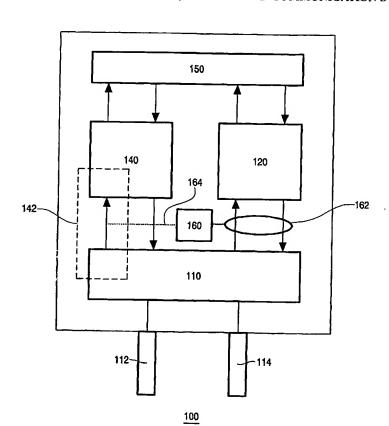
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): PITCHERS, Stephen,

M. [GB/GB]; c/o Philips Intellectual Property & Standards, Cross Oak Lane, Redhill, Surrey RH1 5HA (GB).

- (74) Agent: WHITE, Andrew, G.; Philips Intellectual Property & Standards, Cross Oak Lane, Redhill, Surrey RH1 5HA (GB).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,

[Continued on next page]

(54) Title: ELECTRONIC DEVICE, METHOD AND COMMUNICATION SYSTEM



(57) Abstract: An electronic device (100) has a first wireless transceiver module (120) using a first communication protocol and a second wireless transceiver module (140) using a second communication protocol. Both wireless transceiver modules are coupled between an application layer (150) and an at least partially shared physical layer (110) of the electronic device (100). The second wireless transceiver module is equipped with a controller (142) to avoid interference with external signals on a frequency used by the second communication protocol. To avoid destructive interference in the physical layer (110) resulting from simultaneous communications from or to the first wireless transceiver module (120) and the second wireless transceiver module (140), the electronic device (100) further includes a mediator (160), which is responsive to an enabled communication involving the first wireless transceiver module (120), and which feeds a blocking signal into the controller (142) to avoid interference between the enabled communication and a transmission of the second wireless transceiver module (140).

## WO 2004/056045 A1



SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

### **Declaration under Rule 4.17:**

as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD,

SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

#### Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.